

In The Claims

Please cancel claims 2, 6 and 13-17.

Please amend claims 1, 3, 5 as follows:

1. (Third Amendment) A semiconductor device, comprising:

a semiconductor chip having a plurality of electrode pads formed at a periphery of a front surface thereof;

a wiring film formed on the front surface side of said semiconductor chip by laminating an insulation film on a lead pattern;

an outer connection terminal formed so as to protrude above said wiring film;

a plurality of leads extending from said wiring film and connected to the electrode pads on said semiconductor chip at extended tips end thereof;

an external ring provided so as to surround said semiconductor chip and formed with a plurality of through holes positioned entirely outside of a perimeter edge of the semiconductor chip, the external ring comprising an outwardly expanded portion formed on an inner circumferential surface of the external ring and positioned on a rear surface of the semiconductor chip; and

a sealing resin filled between said semiconductor chip and said external ring, the sealing resin further being filled in the through holes to increase the contact area between the sealing resin and the external ring which strengthens the bond between the sealing resin and the external ring.

3. (Third Amendment) A lead frame, comprising:

a wiring film formed by laminating an insulation film on a lead pattern;

an external connection terminal formed so as to protrude above said wiring film;

a plurality of leads extending from said wiring film and forming connecting portions to electrode pads on a semiconductor chip at extended tip ends thereof;

an external ring provided outside said wiring film, having an opening portion capable of housing said semiconductor chip and formed with a plurality of through holes positioned entirely outside of a perimeter edge of the semiconductor chip when the opening portion houses the semiconductor chip wherein an outwardly expanded open portion is formed an inner circumferential surface of the external ring and positioned on a rear surface side of the semiconductor chip such that the expanded open portion is formed at an angle of 30° to 45° relative to the inner circumferential surface of the external ring.

5. (Third Amendment) An electronic apparatus including a printed wiring board loaded with a semiconductor chip, said semiconductor device, comprising:

a semiconductor chip having a plurality of electrode pads formed at a periphery of a front surface thereof;

a wiring film formed on a front surface side of said semiconductor chip by laminating an insulation film on lead patterns;

an outer connection terminal formed so as to protrude above said wiring film;

a plurality of leads extending from said wiring film and connected to the electrode pads on said semiconductor chip at extended tip ends thereof;

an external ring provided so as to surround said semiconductor chip and, formed with a plurality of through holes positioned entirely outside of a perimeter edge of the semiconductor chip, the external ring comprising an outwardly expanded portion formed on an inner circumferential surface of the external ring and positioned on a rear surface of the semiconductor chip; and

a sealing resin filled between said semiconductor chip and said external ring, the sealing resin further being filled in the through holes to increase the contact area between the sealing resin and the external ring which strengthens the bond between the sealing resin and the external ring, wherein said external connection terminal and an electrode on said printed wiring board are connected.